Amendments to the Claims

These claims will replace all prior versions, and listings, of claims in the application:

1. (currently amended)   A transmitter capable of transmitting a stream of known symbols and unknown symbols through a transmission channel to a first receiver that receives said transmitted stream of known symbols and unknown symbols distorted by intersymbol interference (ISI) ~~and reduces therein a precursor ISI signal~~, wherein said first receiver comprises 1) a decision feedback equalizer for receiving said stream of distorted known symbols and distorted unknown symbols and generating a sequence of detected symbols and 2) a known symbol generator for generating a copy of a first known symbol prior to an estimation of said first known symbol by said decision feedback equalizer, said decision feedback equalizer using said copy of said first known symbol to reduce a ~~first~~ precursor ISI signal in a second symbol, said second symbol being transmitted prior to said first known symbol, wherein the transmitter comprises~~:~~ a known symbol distribution controller capable of inserting a plurality of known symbols into an outgoing stream of unknown symbols in an optimum distribution ~~in order to improve the performance of said first receiver~~.

2. (currently amended)   The transmitter as set forth in Claim 1 wherein said known symbol distribution controller is capable of determining a decision delay value~~, d,~~ associated with said decision feedback equalizer.

3. (currently amended)   The transmitter as set forth in Claim 2 wherein said known symbol

distribution controller determines said optimum distribution according to ~~a~~the decision delay

value ~~of d~~.

4. (currently amended)   The transmitter as set forth in Claim 3 wherein said known symbol

distribution controller separates each inserted known symbol from a nearest inserted known

symbol by a distance at least equal to the decision delay value ~~d~~.

5. (currently amended)   The transmitter as set forth in Claim 1 wherein said transmitted

stream of known symbols and unknown symbols is received by a plurality of receivers similar to

said first receiver and wherein said known symbol distribution controller is capable of

determining a plurality of decision ~~delays~~ delay values, wherein each decision delay value ~~, d, of~~

~~said plurality of decision delay~~ is associated with a corresponding decision feedback equalizer in

one of said plurality of receivers.

6. (currently amended)   The transmitter as set forth in Claim 5 wherein said known symbol

distribution controller is capable of determining a maximum decision delay value ~~one of said~~

~~plurality of decision delay~~.

7. (currently amended)   The transmitter as set forth in Claim 6 wherein said known symbol

distribution controller determines said optimum distribution according to ~~a value of~~ said

maximum decision delay value.

8. (currently amended)   The transmitter as set forth in Claim 7 wherein said known symbol

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distribution controller separates each inserted known symbol from a nearest inserted known

symbol by a distance at least equal to said maximum decision delay value.

9. (currently amended)   A network comprising:

a plurality of receivers, each of said receivers capable of receiving from a transmission

channel an incoming stream of known symbols and unknown symbols distorted by intersymbol

interference (ISI), wherein each of said receivers contains an apparatus for reducing a precursor

ISI signals; comprising:

a decision feedback equalizer capable of receiving said incoming stream of distorted

known symbols and distorted unknown symbols and generating a sequence of detected symbols;

and

a known symbol generator capable of generating a copy of a first known symbol prior to

an estimation of said first known symbol by said decision feedback equalizer, wherein said

decision feedback equalizer uses said copy of said first known symbol to reduce a first precursor

ISI signal in a second symbol, said second symbol being transmitted prior to said first known

symbol; and

a transmitter capable of transmitting said stream of known symbols and unknown

symbols, said transmitter comprising a known symbol distribution controller capable of inserting

a plurality of known symbols into an outgoing stream of unknown symbols in an optimum

distribution in order to improve the performance of a first one of said receivers.

10. (currently amended)   The network as set forth in Claim 9 wherein said known symbol

distribution controller is capable of determining a first decision delay value associated with a

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first decision feedback equalizer in said first receiver.

11. (currently amended)   The network as set forth in Claim 10 wherein said known symbol distribution controller determines said optimum distribution according to ~~a value of~~ said first decision delay value.

12. (currently amended)   The network as set forth in Claim 11 wherein said known symbol distribution controller separates each inserted known symbol from a nearest inserted known symbol by a distance at least equal to said first decision delay value.

13. (currently amended)   The network as set forth in Claim 9 wherein said known symbol distribution controller is capable of determining a plurality of decision ~~delays~~delay values, wherein each decision delay value ~~of said plurality of decision delays~~ is associated with a corresponding decision feedback equalizer ~~in one of said plurality of receivers~~.

14. (currently amended)   The network as set forth in Claim 13 wherein said known symbol distribution controller is capable of determining a maximum decision delay value~~one of said plurality of decision delays~~.

15. (currently amended)   The network as set forth in Claim 14 wherein said known symbol distribution controller determines said optimum distribution according to ~~a value of~~ said maximum decision delay value.

16. (currently amended)   The network as set forth in Claim 15 wherein said known symbol distribution controller separates each inserted known symbol from a nearest inserted known symbol by a distance at least equal to said maximum decision delay value.

17. (currently amended)   A method of transmitting known symbols and unknown symbols, comprising:

For use a network comprising providing a transmitter and a plurality of receivers in a network, wherein each receiver receives from a transmission channel an incoming stream of known symbols and unknown symbols distorted by intersymbol interference (ISI), and wherein each receiver comprises: 1) a decision feedback equalizer that receives the incoming stream of distorted known symbols and distorted unknown symbols and generates a sequence of detected symbols; and 2) a known symbol generator that generates a copy of a first known symbol prior to an estimation of the first known symbol by the decision feedback equalizer, wherein the decision feedback equalizer uses the copy of the first known symbol to reduce a first precursor ISI signal in a second symbol, said second symbol being transmitted prior to the first known symbol; a method of transmitting the known symbols and unknown symbols comprising the steps of:

inserting a plurality of known symbols into an outgoing stream of unknown symbols in an optimum distribution capable of improving the performance of a first one of the receivers; and

transmitting the stream of known symbols and unknown symbols according to the optimum distribution.

18. (currently amended)   The method as set forth in Claim 17, further comprising the steps of:

determining a plurality of decision ~~delays~~delay values, wherein each decision delay value ~~of the plurality of decision delays~~ is associated with a corresponding decision feedback equalizer ~~in one of the plurality of receivers~~; and

determining a maximum decision delay value~~one of the plurality of decision delays~~.

19. (currently amended)   The method as set forth in Claim 18, further comprising ~~the step of~~ determining the optimum distribution according to ~~a value of~~ the maximum decision delay value.

20. (currently amended)   The method as set forth in Claim 19, further comprising ~~the step of~~ separating each inserted known symbol from a nearest inserted known symbol by a distance at least equal to the maximum decision delay value.